Acquisition Reform Success Story

AWACS
Broadcast Intelligence (BI) Terminal Program

Program Managers: Capt VanAmeyden
AWACS SPD: Col G. Connor
PEO: BGen Craig Weston
Contractors: Multiple
Success Story OPR: Capt VanAmeyden

Program Description:
The BI terminal program was initiated by VCJCS shortly after the Bosnian shootdown of a US F-16 in Jun 95. By installing a terminal to receive tactical intelligence broadcasts on US AWACS aircraft, the Vice Chief felt the situational awareness of AWACS and the aircraft controlled by it would be significantly enhanced and future such incidents could be avoided. Program guidance was provided informally by memos, emails, and wording in PPBS documents; no PMD or ORD was promulgated. Given this latitude the AWACS Program Office devised a three phase program which would began with a Stand Alone Terminal and progress to a Partially Integrated Terminal and then to a Fully Integrated Terminal, each terminal building upon its predecessor. Each terminal would utilize COTS/GOTS components to the maximum extent possible to reduce costs and expedite fielding. This success story covers the first phase, the Stand Alone Terminal.

How use of COTS/GOTS and Streamlined Contracting Made a Difference:
While awaiting program funding, the Program Office surveyed existing BI hardware and software (HW/SW) and selected the Multi-mission Advanced Tactical Terminal (MATT) receiver manufactured by Allied Signal (now Raytheon), Baltimore, MD with software jointly developed by SPAWAR (Navy) and Allied Signal, a processor-display (workstation) manufactured by Codar Technology, Longmont, CO, and government developed system software. Under SPO-established criteria, the HW/SW selected had to be: low in cost, adequate in performance, currently in production, accessible through an existing contract, and upgradable to meet evolving DII/COE and IBS standards. The use of existing contracts saved the time and effort that would have otherwise gone into creating new contracts and enabled each of these products to be acquired and to undergo at least one upgrade/modification cycle within a 12 month period. The SPO and Boeing, Seattle, WA, the AWACS integration contractor, also used a contracting initiative called "one pass" which significantly shortened the time between RFP release and contract award. Based on a statement of objectives prepared by the SPO, Boeing would prepare sequentially a statement of work, detailed task descriptions, and task labor hour estimates. Government-contractor agreement was reached at each step before moving to the next. From this point in the process, Boeing could quickly prepare a proposal, and the SPO could easily evaluate and negotiate it. Knowing exactly what the government wanted lowered the contractor's level of uncertainty and ultimately the government's cost. Further, only one pass was made through this sequence of steps, eliminating the time consuming proposal-negotiation reiterations normally experienced.

By the end of Jul 98, 18 months after receipt of program funding, the SPO had delivered to Boeing as GFE the major HW/SW components of the Stand Alone Terminal, and Boeing had successfully assembled and tested the terminal both in the lab and on TS-3, the AWACS testbed aircraft. A month and a half later the terminal on TS-3 made an impressive operational debut during Expeditionary Force Experiment 1998 "live fly".

The AWACS BI Terminal Program had demonstrated that a new C4ISR system using COTS/GOTS hardware and software components and using existing contracts and a time-cutting contract initiative could be fielded quickly and inexpensively with excellent operational results.

NOTES: (1) MATT HW/SW and the Airborne Broadcast Intelligence (ABI) system software is undergoing one more upgrade/modification cycle of prior to the terminal's installation on the US E-3 fleet at Tinker AFB starting in Jun 99. (2) The total cost to procure/develop, assemble, test, install, and initially spare the Stand Alone Terminal is projected to be $17M. (3) The use of COTS/GOTS imposes a very heavy workload on the SPO to make certain that the individual HW/SW components are delivered on time and function properly together, the latter requiring extensive engineering expertise (provided in this case by MITRE) and free and open dialog between government agencies and contractors participating in the program.

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